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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,402	03/08/2004	Sam Seiichiro Ochi	011775-011111US	9022

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EXAMINER

KITOV, ZEEV

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/796,402

Applicant(s)

OCHI, SAM SEIICHIRO

Examiner

Zeev Kitov

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 - 20 is/are allowed.
- 6) ☒ Claim(s) 1 - 8 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Objection***

Claim 3 is objected to under 37 CFR 1.75 as being a substantial duplicate of Claim 2. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). As a matter of fact, Claim 3 is an exact copy of Claim 2.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3 are rejected under 35 U.S.C. 102() as being anticipated by Johansson (US 5,587,685), which discloses all the elements of Claim 1, including detecting power from a source of power (by elements R3, R4 in Fig. 2), coupling the power to the target circuit in a gradual manner (by element Q2 in Fig.2), detecting noise components in the power (by elements R3 and C2 in Fig. 2), and varying the amount of power delivered to the target circuit in response to the noise component (by element Q2 in Fig. 2, col. 4, lines 43 –67, col. 5, lines 1 – 62).

Regarding Claims 2 and 3, Johansson discloses a coupling that includes controlling the conductivity of a transistor device (element Q2 in Fig.2), the transistor device having series-connection between the source of power and the target circuit.

Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Goerke et al. (US 5,698,973). Regarding Claim 4, Goerke et al. disclose detecting power from a source of power; coupling the power to the target circuit in a gradual manner; detecting when a current supplied to the target circuit exceeds a threshold; and decoupling the power in response to detecting that the current supplied to the target circuit exceeds a threshold (col.5, lines 51-67, col. 6, lines 1 – 52, col. 6, lines 66 – 67, col.7, lines 1 – 52).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 - 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goerke et al. in a view of Johansson (US 5,587,685). Goerke et al. disclose some of the elements of Claim 5, including a switch coupling a target circuit with a source of power (element 10 in Fig.4), a first detector configured to detect power provided by the source

of power (element 20 in Fig. 4), the first detector operatively coupled with the switch, wherein the switch closes responsive to the first detector. However, it does not disclose a second detector configured detecting noise in the power and coupled to the switch, wherein a conductivity of the switch varies responsive to the second detector.

Johansson discloses a second detector configured detecting noise (element in the power and coupled to the switch, wherein a conductivity of the switch varies responsive to the second detector detecting noise components in the power (by elements R3 and C2 in Fig. 2), and varying the amount of power delivered to the target circuit in response to the noise component (by element Q2 in Fig. 2, col. 4, lines 43 –67, col. 5, lines 1 – 62). Both patents have the same problem solving area, namely providing efficient means for hot plugging of electronic boards. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the Johansson noise detecting and compensating solution into Goerke et al., because as Johansson states (col. 2, lines 4 –31) power supplies transients might be dangerous for electronic equipment.

Regarding Claim 6, Johansson discloses the second detector as being coupled between the source of power source and a gate of the switch (elements R3 and C2 in Fig. 2).

Regarding Claim 7, Goerke et al. further disclose a circuit having a positive terminal and a negative terminal, wherein the switch is a transistor device (element 14 in Fig. 4) having a gate, a source, and a drain, wherein the second detector includes:

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a bias voltage source (elements 190, 108a, 180b and 240 in Fig. 4); an operational amplifier having an inverting input coupled with the positive terminal (through element 180 a in Fig. 4) and coupled with the bias voltage source; a non-inverting input coupled with a negative terminal (through element 170b in Fig. 4); and an output coupled to the gate of the switch.

Regarding Claim 8, Goerke et al. disclose the output of the operational amplifier being coupled with the first detector (element 20 in Fig. 4).

### ***Allowable Subject Matter***

Claims 11 – 20 are allowed. A reason for that is that independent Claims 11, 16 and 19 include following limitation: first circuit means for detecting a connection event wherein a connection is made between a device and a power source, the first circuit means configured to be selectively coupled to and decoupled from the power source. The circuit means detecting a connection event and being connected to or disconnected from the power source have not been found in a collected prior art of the record.

Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. A reason for that is that according to Claim 9 the bias voltage source is being coupled with both the first detector and the second detectors, while the first detector detects application of power and the second one detects the noise in the power.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeev Kitov whose current telephone number is (571) 272 - 2052. The examiner can normally be reached on 8:00 – 4:30. If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272 – 2800, Ext. 36. The fax phone number for organization where this application or proceedings is assigned is (703) 872-9306 for all communications.

Z.K.  
11/21/2004

*Stephen W. Jackson*  
11-22-04

STEPHEN W. JACKSON  
PRIMARY EXAMINER